

CLAIMS

What is claimed:

1. A mobile communication system, comprising:
a server;
a corporate information system (CIS) coupled to the server through a network;
a communications network; and
a plurality of speech terminals coupled to the server through the communications network, the speech terminals accessing data in the CIS through voice or digital signals.
2. The mobile communication system of claim 1 wherein the voice signals are recognized through speech recognition technology.
3. The mobile communication system of claim 1 wherein the server is a modular appliance.
4. The mobile communication system of claim 1 wherein the communication network includes a public network and a private network.
5. The mobile communication system of claim 4 wherein the server is configured to distribute incoming calls from the public communications network to the private communications network.

6. The mobile communication system of claim 4 wherein the server is configured to distribute outgoing calls from the private communications network to the public communications network.

7. The mobile communication system of claim 4 wherein the server is configured to distribute incoming and outgoing calls to the private communications network.

8. The mobile communication system of claim 4 wherein the server is configured to distribute incoming and outgoing calls to the public communications network.

9. The mobile communication system of claim 1 wherein the speech terminals are attended devices.

10. The mobile communication system of claim 1 wherein the speech terminals are unattended devices.

11. The mobile communication system of claim 1 wherein a user accesses one or more parties through a speech terminal using the e-mail address, phone number, or any other form of identification for the one or more parties stored in the CIS.

12. The mobile communication system of claim 1 wherein the server dynamically associates a user with a speech terminal using data stored in the CIS, the association created when the user logs on to the mobile communication system with a speech terminal.

13. The mobile communication system of claim 12 wherein the CIS stores the association between the user and the speech terminal as a user profile, the CIS

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accessing the user profile every time the user logs on to the mobile communication system using the speech terminal.

14. The mobile communication system of claim 1 wherein user authentication is required to access the data in the CIS.

15. The mobile communication system of claim 14 wherein the authentication comprises a code.

16. The mobile communication system of claim 14 wherein the authentication comprises a matching voice characteristic.

17. The mobile communication system of claim 1 wherein the data in the CIS includes contact information.

18. The mobile communication system of claim 1 wherein the data in the CIS includes e-mail messages.

19. The mobile communication system of claim 1 wherein the data in the CIS includes address information.

20. The mobile communication system of claim 1 wherein the data in the CIS includes calendar and task lists.

21. The mobile communication system of claim 1 wherein the data in the CIS includes directory lists.

22. The mobile communication system of claim 1 wherein the data in the CIS includes customer relationship management information.

23. The mobile communication system of claim 1 wherein the data in the CIS includes sales force automation information.

24. The mobile communication system of claim 1 wherein the data in the CIS includes field force automation information.

25. The mobile communication system of claim 1 wherein the data in the CIS includes information related to an organization's employees.

26. The mobile communication system of claim 25 wherein the data in the CIS includes information from data repositories internal to the organization.

27. The mobile communication system of claim 25 wherein the data in the CIS includes information from data repositories external to the organization.

28. The mobile communication system of claim 1 wherein the data in the CIS includes information from databases and web sites on the Internet.

29. The mobile communication system of claim 1 wherein the speech terminals are configured to allow a user to access and update the data in the CIS through the speech terminals.

30. The mobile communication system of claim 29 wherein the data in the CIS is accessible to the user and to other users registered in the CIS.

31. The mobile communication system of claim 1 wherein the server is configured to allow a user to perform tasks using the CIS.

32. The mobile communication system of claim 31 wherein the tasks include sending and receiving messages.

33. The mobile communication system of claim 32 wherein the messages are e-mail messages.

34. The mobile communication system of claim 31 wherein the tasks include forwarding calls.

35. The mobile communication system of claim 31 wherein the tasks include conferencing with other parties registered in the CIS.

36. The mobile communication system of claim 1 wherein a set of responses to a user changes dynamically depending on the needs of the user.

37. The mobile communication system of claim 36 wherein the set of responses to the user includes a recorded message.

38. The mobile communication system of claim 36 wherein the set of responses to the user is an on-the-fly translation of responses into sounds using text-to-speech technology.

39. The mobile communication system of claim 1 wherein the speech terminals include multi-modal interfaces.

40. The mobile communication system of claim 38 wherein the user can input information to the server through the multi-modal interfaces using text, keystrokes, and speech recognition.

41. The mobile communication system of claim 38 wherein the multi-modal interfaces present information to the server using a combination of sound, text, graphics, and video.

42. The mobile communication system of claim 41 wherein the sound is generated by text-to-speech technology.

43. The mobile communication system of claim 41 wherein the sound is generated by playing recorded files.

44. The mobile communication system of claim 41 wherein the sound is generated by a continuous stream of sound data sent to the multi-modal interfaces.

45. The mobile communication system of claim 41 wherein the video is generated by a continuous stream of video data sent to the multi-modal interfaces.

46. The mobile communication system of claim 1 wherein the speech terminals include telephones.

47. The mobile communication system of claim 1 wherein the speech terminals include personal digital assistants.

48. The mobile communication system of claim 1 wherein the speech terminals include computers.

49. The mobile communication system of claim 1 wherein the network is the Internet.

50. A server for a mobile communications network having speech terminals, the server comprising:

means for distributing incoming and outgoing calls from the speech terminals;

and

means for accessing data in a corporate information system ("CIS") through voice or digital signals received from the speech terminals through the mobile communications network.

51. The mobile communication system of claim 50 wherein the voice signals are recognized through speech recognition technology.

52. The server of claim 50 wherein the server functions as a modular appliance.

53. The server of claim 50 wherein the mobile communication network includes a public and a private network.

54. The server of claim 53 further comprising means to distribute incoming calls from the public communications network to the private communications network.

55. The server of claim 53 further comprising means to distribute outgoing calls from the private communications network to the public communications network.

56. The server of claim 53 further comprising means to distribute incoming and outgoing calls to the private communications network.

57. The server of claim 53 further comprising means to distribute incoming and outgoing calls to the public communications network.

58. The server of claim 50 wherein the speech terminals are attended devices.

59. The server of claim 50 wherein the speech terminals are unattended devices.

60. The server of claim 50 further comprising means for allowing a user to access one or more parties through a speech terminal using the e-mail address, phone number, or any other form of identification for the one or more parties stored in the CIS.

61. The server of claim 50 further comprising means for dynamically associating a user with a speech terminal using data stored in the CIS, the association created when the user logs on to the server with a speech terminal.

62. The server of claim 61 wherein the CIS stores the association between the user and the speech terminal as a user profile, the CIS accessing the user profile every time the user logs on to the server using the speech terminal.

63. The server of claim 50 further comprising means for requiring user authentication to access the data in the CIS.

64. The server of claim 63 wherein the authentication comprises a code.

65. The server of claim 63 wherein the authentication comprises a matching voice characteristic.

66. The server of claim 50 wherein the data in the CIS includes contact information.

67. The server of claim 50 wherein the data in the CIS includes e-mail messages.

68. The server of claim 50 wherein the data in the CIS includes address information.

69. The server of claim 50 wherein the data in the CIS includes calendar and task lists.

70. The server of claim 50 wherein the data in the CIS includes directory lists.

71. The server of claim 50 wherein the data in the CIS includes customer relationship management information.

72. The server of claim 50 wherein the data includes sales force automation.

73. The server of claim 50 wherein the data includes field force automation.

74. The server of claim 50 wherein the data in the CIS includes information related to an organization's employees.

75. The server of claim 50 wherein the data in the CIS includes information from data repositories internal to the organization.

76. The server of claim 50 wherein the data in the CIS includes information from data repositories external to the organization.

77. The server of claim 50 wherein the data in the CIS includes information from databases and web sites on the Internet.

78. The server of claim 50 wherein the speech terminals are configured to allow a user to access and update the data in the CIS through a speech terminal.

79. The server of claim 78 wherein the data is accessible to the user and to other users registered in the CIS.

80. The server of claim 50 further comprising means to allow a user to perform tasks using the CIS.

81. The server of claim 80 wherein the tasks include sending and receiving messages.

82. The server of claim 80 wherein the messages are e-mail messages.

83. The server of claim 80 wherein the tasks include forwarding calls.

84. The server of claim 80 wherein the tasks include conferencing with other parties registered in the CIS.

85. The server of claim 50 further comprising means for allowing a set of responses to a user to change dynamically depending on the needs of the user.

86. The server of claim 85 wherein the set of responses to the user includes a recorded message.

87. The server of claim 85 wherein the set of responses to the user is an on-the-fly translation of responses into sounds using text-to-speech technology.

88. The server of claim 50 wherein the speech terminals include multi-modal interfaces.

89. The server of claim 88 wherein the user can input information to the server through the multi-modal interfaces using text, keystrokes, and speech recognition.

90. The server of claim 88 wherein the multi-modal interfaces present information to the server using a combination of sound, text, graphics, and video.

91. The server of claim 90 wherein the sound is generated by text-to-speech technology.

92. The server of claim 90 wherein the sound is generated by playing recorded files.

93. The server of claim 90 wherein the sound is generated by a continuous stream of sound data sent to the multi-modal interfaces.

94. The server of claim 90 wherein the video is generated by a continuous stream of video data sent to the multi-modal interfaces.

95. The server of claim 50 wherein the speech terminals include telephones.

96. The server of claim 50 wherein the speech terminals include personal digital assistants.

97. The server of claim 50 wherein the speech terminals include computers.

98. The server of claim 50 wherein the mobile communications network includes the Internet.

99. A computer program product comprising:

a computer useable medium and computer readable code embodied on the useable medium for causing a plurality of speech terminals coupled to the computer through a communications network to access data in a corporate information system (CIS) coupled to the computer through the network, the speech terminals accessing data in the CIS through voice or digital signals, the voice signals recognized by speech recognition technology.

100. The machine readable storage medium of claim 99 wherein the computer is a server configured as a modular appliance.

101. The machine readable storage medium of claim 99 wherein the communications network includes a public network and a private network.

102. The machine readable storage medium of claim 100 wherein the server is configured to distribute incoming calls from the public communications network to the private communications network.

103. The machine readable storage medium of claim 100 wherein the server is configured to distribute outgoing calls from the private communications network to the public communications network.

104. The machine readable storage medium of claim 100 wherein the server is configured to distribute incoming and outgoing calls to the private communications network.

105. The machine readable storage medium of claim 100 wherein the server is configured to distribute incoming and outgoing calls to the public communications network.

106. The machine readable storage medium of claim 100 wherein the speech terminals are attended devices.

107. The machine readable storage medium of claim 100 wherein the speech terminals are unattended devices.

108. The machine readable storage medium of claim 100 wherein a user accesses one or more parties through a speech terminal using the e-mail address, phone number, or any other form of identification for the one or more parties stored in the CIS.

109. The machine readable storage medium of claim 100 wherein the server dynamically associates a user with a speech terminal using data stored in the CIS, the association created when the user logs on to the mobile communication system with a speech terminal.

110. The machine readable storage medium of claim 109 wherein the CIS stores the association between the user and the speech terminal as a user profile, the CIS accessing the user profile every time the user logs on to the mobile communication system using the speech terminal.

111. The machine readable storage medium of claim 100 wherein user authentication is required to access the data in the CIS.

112. The machine readable storage medium of claim 111 wherein the authentication comprises a code.

113. The machine readable storage medium of claim 111 wherein the authentication comprises a matching voice characteristic.

114. The machine readable storage medium of claim 100 wherein the data in the CIS includes contact information.

115. The machine readable storage medium of claim 100 wherein the data in the CIS includes e-mail messages.

116. The machine readable storage medium of claim 100 wherein the data in the CIS includes address information.

117. The machine readable storage medium of claim 100 wherein the data in the CIS includes calendar and task lists.

118. The machine readable storage medium of claim 100 wherein the data in the CIS includes directory lists.

119. The machine readable storage medium of claim 100 wherein the data in the CIS includes customer relationship management information.

120. The machine readable storage medium of claim 100 wherein the data in the CIS includes sales force automation information.

121. The machine readable storage medium of claim 100 wherein the data in the CIS includes field force automation information.

122. The machine readable storage medium of claim 100 wherein the data in the CIS includes information related to an organization's employees.

123. The machine readable storage medium of claim 122 wherein the data in the CIS includes information from data repositories internal to the organization.

124. The machine readable storage medium of claim 122 wherein the data in the CIS includes information from data repositories external to the organization.

125. The machine readable storage medium of claim 100 wherein the data in the CIS includes information from databases and web sites on the Internet.

126. The machine readable storage medium of claim 100 wherein the speech terminals are configured to allow a user to access and update the data in the CIS through the speech terminals.

127. The machine readable storage medium of claim 126 wherein the data in the CIS is accessible to the user and to other users registered in the CIS.

128. The machine readable storage medium of claim 100 wherein the server is configured to allow a user to perform tasks using the CIS.

129. The machine readable storage medium of claim 128 wherein the tasks include sending and receiving messages.

130. The machine readable storage medium of claim 129 wherein the messages are e-mail messages.

131. The machine readable storage medium of claim 128 wherein the tasks include forwarding calls.

132. The machine readable storage medium of claim 128 wherein the tasks include conferencing with other parties registered in the CIS.

133. The machine readable storage medium of claim 100 wherein a set of responses to a user changes dynamically depending on the needs of the user.

134. The machine readable storage medium of claim 133 wherein the set of responses to the user includes a recorded message.

135. The machine readable storage medium of claim 133 wherein the set of responses to the user is an on-the-fly translation of responses into sounds using text-to-speech technology.

136. The machine readable storage medium of claim 100 wherein the speech terminals include multi-modal interfaces.

137. The machine readable storage medium of claim 136 wherein the user can input information to the server through the multi-modal interfaces using text, keystrokes, and speech recognition.

138. The machine readable storage medium of claim 137 wherein the multi-modal interfaces present information to the server using a combination of sound, text, graphics, and video.

139. The machine readable storage medium of claim 138 wherein the sound is generated by text-to-speech technology.

140. The machine readable storage medium of claim 138 wherein the sound is generated by playing recorded files.

141. The machine readable storage medium of claim 138 wherein the sound is generated by a continuous stream of sound data sent to the multi-modal interfaces.

142. The machine readable storage medium of claim 138 wherein the video is generated by a continuous stream of video data sent to the multi-modal interfaces.

143. The machine readable storage medium of claim 100 wherein the speech terminals include telephones.

144. The machine readable storage medium of claim 100 wherein the speech terminals include personal digital assistants.

145. The machine readable storage medium of claim 100 wherein the speech terminals include computers.

146. The machine readable storage medium of claim 100 wherein the network is the Internet.